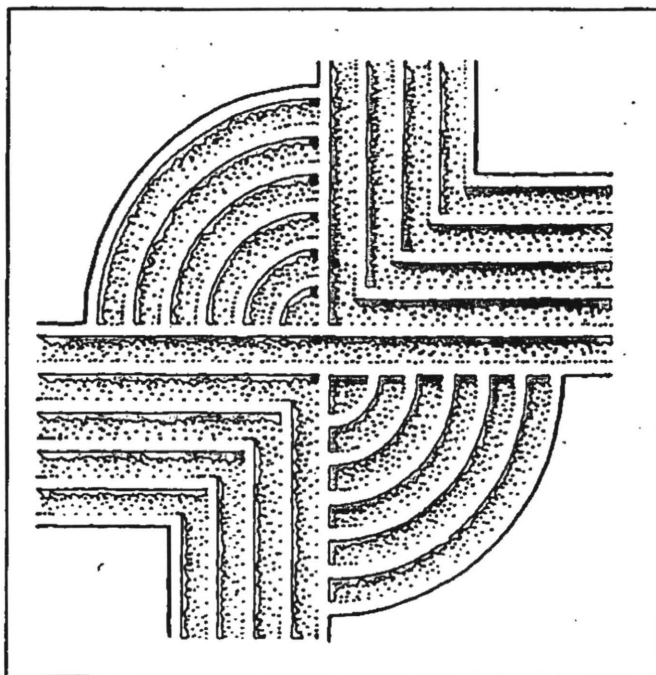


NOT BY MEAT ALONE: THE USE OF PLANT FOODS AMONG THE ANTEBELLUM CAROLINIANS



RESEARCH CONTRIBUTION 6

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NOT BY MEAT ALONE:
THE USE OF PLANT FOODS AMONG THE ANTEBELLUM CAROLINIANS

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Chicora Research Contribution 6

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January 1985

Subsistence systems rarely depend solely on animal resources, yet an examination of the archaeological literature suggests that this might be so. Rarely are ethnobotanical remains collected, analyzed, and reported. It is even more rare to find an integration of faunal and ethnobotanical data into an overall discussion of historic foodways. To understand foodways of historic peoples we must also understand the roles of plants in the subsistence strategy. In this paper, data from several recent studies conducted in the Charleston, South Carolina area are used to demonstrate that floral remains have a role to play in the reconstruction of foodways and, further, that both archaeology and history can contribute to the reconstruction. A discussion of the potential, and the problems, of ethnobotanical studies precede a discussion of the present data base.

Subsistence strategy is a central aspect of society, and the analysis of faunal and floral remains suggests that such studies can provide a wealth of information on past cultures. Foodways are found to be one of the most culturally conservative aspects of behavior (Reitz and Cumbaa 1983). Foodways are sensitive to, and thus reflect, economic and political events, socioeconomic status, ethnic affiliation, tradition, and local resource availability (Reitz and Cumbaa 1983). Environmental affiliation is expected to be a key factor in the use of plant foods. In her study of faunal assemblages, Reitz (1984) noted

Paper presented at the 1985 Society for Historical Archaeology meetings in Boston, Massachusetts.

urban/rural differences which cross-cut socioeconomic status and temporal affiliation. Urban residents used more domestic animal meat and a wider range of domestic species. There was less wild animal meat and fewer species used. Reitz suggests these differences probably reflect the functioning of the market system. Similar trends may be found in the floral assemblages.

Socioeconomic status is expected to be another key in the utilization of plant foods. Reitz noted that wealthy individuals, whether rural or urban, utilized a greater range of species. In addition to a wider variety of food sources, Reitz and Cumbaa (1983) noted that high status is reflected in a closer adherence to traditional foodways and a diet that is more expensive to maintain. This relative expense is expressed as either an expenditure of time or money.

It has been suggested that foodways are one of the most conservative aspects of culture, and as such ethnic affiliation also should be reflected in the use of plant foods. Faunal studies, however, suggest that environmental factors, or availability of resources, will play a more decisive role in the foodways of historic peoples than will tradition (Reitz 1979; Reitz and Cumbaa 1983). Ethnic affiliation may be more strongly reflected in preparation techniques than in the foods used. This leads to a major problem plaguing ethnobotanical studies: preservation bias.

Faunal remains generally are large, easily recognizable, and relatively well preserved. Further, there is essentially one type of food product being exploited -- meat. Deriving information on ethnobotanical remains is more difficult. Many plants were consumed in their entirety, leaving no discarded by-products or waste. The by-products of other plants are fragile and, while discarded, may not be preserved. Plant remains are not expected to be preserved or recovered in proportion to their degree of utilization. This

is further complicated by the preservation of plant remains only in carbonized or waterlogged situations. Waterlogged situations are unusual, and features deep enough to penetrate the water table, such as wells and privies, are often filled under unusual circumstances. Thus, the data from a single feature may not be a true reflection of the range of food activities conducted at a site. Carbonized plant remains may be more uniformly dispersed through the archaeological record, but the carbonization of plant remains poses additional problems. Ethnobotanical remains are common at prehistoric sites because many plant foods were prepared or parched in open fires, and foods were consumed and discarded in the same location. At historic sites, cooking was also done over open fires, but many foods were boiled, stewed, or fried (Hilliard 1972:51; Zierden and Trinkley 1984:13). Plants accidentally, or purposefully, burned in the hearth have the greatest chance of being preserved, but such remains are expected to represent only a small sample of the discarded plant foods at a site. Food preparation techniques may diminish the potential for preservation of plant remains (Zierden and Trinkley 1984:14).

Disposal practices and post-depositional disturbances also affect the preservation of plant remains. Carbonized floral materials are extremely fragile, and may be destroyed by pedestrian traffic and erosion. Subsequent ground disturbing activities, such as plowing or the continuous redistribution common on urban sites (Honerkamp and Fairbanks 1984) may also destroy deposited plant remains. Deliberately deposited subsurface features are the best source of ethnobotanical remains (Zierden and Trinkley 1984:15).

Despite these drawbacks, our research suggests that there is considerable potential for the study of subsistence strategies through the examination of both the historical documents and ethnobotanical remains. Historically, vegetables and fruits have had an important, although often

ignored, place in the diet of people throughout the world. Scurvy and pellagra were merely two of the many malnutritional diseases which were found to be cured or eased by the inclusion of fruits and vegetables in everyday eating habits. Unfortunately, although the inclusion of vegetables and fruits in the diet was found to be desirable, it was also seldom specifically mentioned. As early as the thirteenth century, the wife of Simon de Montfort kept extensive household accounts which detailed supplies and prices. According to her accounts, rice was so special that it was kept under lock and key, and spices, although expensive, were considered necessities. As the historian Asa Briggs notes, however, "fruit and vegetables from the orchard and garden were not itemized in the accounts; they were taken for granted" (Briggs 1983: 78).

Unfortunately, this trend seems to have continued through time. This could be a result of the relative lack of status differentiation between vegetables as opposed to fruits and meats. For instance, J.B. Grimball, a prominent Charlestonian, described 12 antebellum dinners in his diary. At a dinner which he gave in honor of Mr. Aiken, the first course consisted of calf's head soup and unspecified vegetables. The second course included broiled bass and fried whiting, while the third course boasted mutton, ham, turkey, and oysters. For dessert Grimball served ice cream, apples, bananas, and groundnuts (Grimball 1852-1857:20). Of all the dinners which he described in his diary, he mentions only five specific vegetables -- potatoes, beets, beans, rice, and macaroni (not, strictly speaking, a vegetable, although produced from plants). Of these, potatoes, beets, and macaroni were mentioned three times, while rice and beans were mentioned but once.

Obviously, status alone was not the sole arbiter of which vegetables and fruits were served. Access was at least as important. Peas, beans, corn,

rice, and potatoes were probably easily accessible to both urban and rural dwellers and their use undoubtedly cut across socioeconomic lines. The residents of Charleston and upper class rural dwellers, however, would have had much greater access to imported fruits. This could make these types more sensitive and reliable indicators of status differentials. Mills rhapsodized:

quantities of West India and Florida fruits are exposed
for sale daily in this market, and at very reasonable rates,
it being not unusual for the finest sweet oranges to be
sold for \$1 per hundred (Mills 1826:424-425).

At the dinners described by Grimball in his diary, oranges, bananas, and apples were frequently the fresh fruits served for dessert. Olives were mentioned twice; Malaga grapes, pineapple, and limes for sherbert were each mentioned once.

Lack of specification seems to occur continually in the attempt to determine how expensive, desirable, or difficult to obtain certain vegetables were. The relative omission of references to particular vegetables as opposed to meats, fish, and fruits is probably indicative of the lack of importance assigned to them. Imported fruits were apparently a sign of the sophistication of Charleston and the conspicuous consumption by the wealthy of not only goods, but also foods. It is possible, however, that information on both common and exotic vegetables available in the Charleston area could be obtained by an intensive search through diaries, account books, newspaper advertisements, contemporary journals, and cookbooks. All of these sources, however, would have to be used with caution and a strict regard for inherent biases.

A sample of nine cookbooks was examined for the purposes of determining

the types of plant foods used, the predominant cooking methods, and the ratio of meat to vegetable or fruit dishes. A wide variety of vegetables and fruits are referred to in recipes, including non-indigenous plants. These recipes were influenced by other cultures, including English, French, Spanish, and Caribbean. Cookbooks were written for the use of the high status groups, who were able to obtain a wider variety of foods than the middle to lower classes. Fruits apparently were served fresh, or were used in preserves, baking, ices, or liquors. The vegetables were served boiled, or used in combination with meats in soups, stews, and sauces. No recipes were found which would have directly exposed the vegetables to a fire; hence cooking methods did not promote the preservation of plant foods.

We found it impossible to directly compare meat and vegetable dishes because the two were so frequently combined, but in general vegetables were more commonly mentioned in cookbooks than were meats. The relationship of meat and plant foods in high status society may be viewed as a pyramid. Although meat was the apex of the food pyramid, it was supported by the overwhelming variety of fruits, vegetables, and herbs.

Hooker emphasizes the relationship between cookbooks and high status society, stating:

English cookbooks of the seventeenth and eighteenth centuries, prepared for a very small portion of the population, . . . guided the wealthiest and more sophisticated English and American cooks
lower and middle-class immigrants to America tried, not always successfully, to maintain their unsophisticated English cookery (Hooker 1984:20).

Thus, while cookbooks may be of some use in understanding the foodways of the

high status elements in society, they provide little insight into the world of the common person. If we accept foodways as conservative, then it may be possible to use the 1895-1896 Negro dietary studies (Atwater and Woods 1897) to better understand vegetable and fruit use, cooking methods, and the ratio of meat to plant foods among the lower status groups. The studies showed vegetables and fruits to be very rare. The predominant dietary items were bacon, wheat flour, corn meal, and molasses. Minor dietary items included lard, eggs, butter, milk, rice, sugar, and collards. Cooking was over an open fire and Hoffman noted:

the daily fare is prepared in very simple ways. Corn meal is mixed with water and baked The salt pork is sliced thin and fried Molasses from cane or sorghum is added to the fat . . . which is eaten with the corn bread This is the bill of fare of most of the cabins on the plantations of the "black belt," three times a day during the year (Hoffman quoted in Atwater and Woods 1897:21).

Vegetable foods (primarily wheat flour and corn meal) contributed 68% of the protein and 98% of the carbohydrates in an average diet. Animal sources provided 90% of the fat. Plant foods contributed 62% of the total calorie intake (based on "average dietaries" 100-104 in Atwater and Woods 1897:62-64). We suggest this this may represent the diet of some lower status Charleston groups, as well as some rural dwellers.

It is interesting to note that the diet of a "middle status" Negro farm manager (dietary study 105) included a variety of vegetables, such as string beans, beets, cabbage, green corn, okra, onions, and tomatoes, as well as wheat flour and molasses. Fruits included blackberries and peaches. Vegetables

and fruits contributed 59% of the protein, 3% of the fat, and 98% of the carbohydrates. Over 46% of the calories were provided by the plant foods. It is possible that this diet more closely resembles that of the middle status Charleston population.

The ethnobotanical record, as previously discussed, is affected by the foods used, their methods of preparation and disposal, their preservation in the archaeological record, and the techniques used for their recovery. Our research at Charleston, South Carolina sites has provided few data concerning antebellum foodways.

Peach pits (Prunus persica) are quite common, being found at the McCrady's Tavern (Trinkley 1982), First Trident (Trinkley 1983a), Lodge Alley (Trinkley 1983b), and Atlantic Wharf (Trinkley n.d.) sites. Other cultigens, found less commonly, include corn (Zea mays) from the Beef Market site (Calhoun et al. 1984) and peanut shell (Arachis hypogaea), watermelon (Citrullus lanatus), and cherry or plum (Prunus sp.) from the Atlantic Wharf site. The only wild species found in Charleston has been hickory (Carya sp.) from the First Trident and Atlantic Wharf sites.

Out of at least 29 food plants which may be found at historic sites (Zierden and Trinkley 1984), the archaeological record from Charleston includes only six foods (one Curcubitaceae, one Fabaceae, one Juglandaceae, one Poaceae, and two Rosaceae). None are present in any significant quantities.

The archaeological and historical evidence suggests that two factors are primarily responsible for the low incidence of plant food remains at urban historic sites. First, the primary food preparation techniques of baking, boiling, or stewing are not conducive to the preservation of food remains. Many fruits would be prepared without cooking, further reducing the opportunities for seed preservation. Second, the disposal patterns and subsequent

"disturbances" in an urban setting are especially damaging to ethnobotanical remains.

This, however, is not to suggest that ethnobotanical studies at urban archaeological sites are fruitless. Plant remains are present, albeit in small quantities. Experience in Charleston has indicated that sample sizes for flotation need to be quite large. Minimally 40 liters (10.5 gallons) of soil should be collected from organically rich features. As much as 60 liters (16 gallons) of soil often will provide a better sample. It is unlikely that ethnobotanical investigations will be able, by themselves, to reconstruct historic foodways. The ongoing Charleston research conducted by the Charleston Museum clearly indicates the importance of combining archaeological and historical research. The conscientious collection and analysis of ethnobotanical remains, integrated with thorough historical research will provide an understanding of the importance of plant food remains to the historic diet.

Sources

- Atwater, W.O. and Charles D. Woods
1987 Dietary Studies With Reference to the Food of the Negro in Alabama in 1895 and 1896. Bulletin 38. U.S. Department of Agriculture, Office of Experiment Stations, Washington, D.C.
- Briggs, Asa
1983 A Social History of England. Weidenfeld and Nicolson, London.
- Calhoun, Jeanne A., Elizabeth J. Reitz, Michael B. Trinkley, and Martha A. Zierden
1984 Meat in Due Season: Preliminary Investigations of Marketing Practices in Colonial Charleston. Archaeological Contributions 9. The Charleston Museum, Charleston, South Carolina.
- Grimball, J.B.
1852-: Diary 11. Ms. on file, Robert Scott Small Library, The
1857 College of Charleston, Charleston, South Carolina.
- Hilliard, Sam B.
1972 Hogmeat and Hokecake: Food Supply in the Old South, 1840-1860. Southern Illinois University Press, Carbondale.

- Honerkamp, Nicholas and Charles H. Fairbanks
 1984 Definition of Site Formation Process in Urban Contexts.
American Archaeology, in press.
- Hooker, Richard J., editor
 1984 A Colonial Plantation Cookbook: The Receipt Book of
Harriot Pickney Horry, 1770. University of South Carolina
 Press, Columbia.
- Mills, Robert
 1826 Statistics of South Carolina, Including a View of Its
Natural, Civil, and Military History, General and Particular.
 Hurlbut and Lloyd, Charleston, South Carolina.
- Reitz, Elizabeth
 1979 Spanish and British Subsistence Strategies at St. Augustine,
Florida and Frederica, Georgia. Ph.D. dissertation.
 University of Florida, Gainesville. University Microfilms,
 Ann Arbor.
- 1984 Urban/Rural Contrasts in the Vertebrate Fauna of the Southern
 Coastal Plain. Paper presented at 17th Annual Society for
 Historical Archaeology meetings, Williamsburg, Virginia.
- Reitz, Elizabeth and Stephen Cumbaa
 1983 Diet and Foodways of Eighteenth Century Spanish St. Augustine.
 In Spanish St. Augustine: The Archaeology of a Colonial
Creole Community, edited by Kathleen Deagan, pp. 151-185.
 Academic Press, New York.
- Trinkley, Michael
 1982 Ethnobotanical Analysis of Specimens from McCrady's Tavern and
 Longroom, City of Charleston, South Carolina. In Archaeological
Excavations at McCrady's Longroom, edited by Martha Zierden,
 Elizabeth Reitz, Michael Trinkley, and Elizabeth Paysinger,
 pp. 101-109. The Charleston Museum, Charleston, South Carolina.
- 1983a Analysis of Ethnobotanical Remains, First Trident Site,
 City of Charleston. In An Archaeological Study of the First
Trident Site, Archaeological Contributions 6, edited by
 Martha Zierden, Jeanne Calhoun, and Elizabeth Pinckney, pp. 88-96.
 The Charleston Museum, Charleston, South Carolina.
- 1983b The Lodge Alley Ethnobotanical Samples: Evidence of Plant
 Use from Two Urban Sites, Charleston, South Carolina. In
Archaeological Investigations at Lodge Alley, Charleston,
South Carolina, edited by Martha Zierden, Jeanne Calhoun,
 and Elizabeth Paysinger, pp. 112-119. The Charleston Museum,
 Charleston, South Carolina.
- n.d. Analysis of Ethnobotanical Remains from Atlantic Wharf, City
 of Charleston, South Carolina. Ms. on file, Chicora Foundation,
 Columbia, South Carolina.

- Zierden, Martha and Michael Trinkley
 1984 World Enough and Time: Ethnobotany and Historic Archaeology. South Carolina Antiquities, in press.

Cookbooks Examined in this Study

- Anonymous
 1956 Centennial Anniversary Cook Book. Randolph Wurlitzer Company, North Tonawanda, New York.
- Anonymous
 c. 1848 Holograph ms. on file, The Charleston Museum, Charleston, South Carolina.
- Anonymous
 1971 The Jefferson Davis Receipt. Ben Green Cooper Press, Mableton, Georgia.
- Hooker, Richard J., editor
 1984 A Colonial Plantation Cookbook: The Receipt Book of Harriot Pinckney Horry, 1770. University of South Carolina Press, Columbia.
- Ladies' Aid Society of the First Presbyterian Church of Waverly, New York
 1885 Key to the Cupboard. Free Press Book and Job Printing, n.p.
- Rhett, Blanche S., Lettie Gay, and Helen Woodward
 1930 Two Hundred Years of Charleston Cooking. Jonathan Cape and Harrison Smith, New York.
- Rutledge, Sarah
 1963 The Carolina Housewife, or House and Home: By A Lady of Charleston. Reprinted. Walker, Evans and Cogswell, Charleston, South Carolina. Originally published 1847.
- Simmons, Amelia
 1984 The First American Cookbook: A Facsimile of "American Cookery." Reprinted. Dover Publications, New York. Originally published 1796.
- Youman, A.E.
 1873 A Dictionary of Every-day Wants Containing Twenty-Thousand Receipts in Nearly Every Department of Human Effort. Frank M. Reed, New York.